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(54) **Double-secondary shredders in zero-clearance cutting systems**

(57) True zero-clearance cutting on a commercial scale is provided via a cutting area including a sacrifice material that is relatively softer than the cutter. One example is a cutting system which is capable of cutting a material such as, for example, tape or paper, into a fiber or powder. Destruction of the material is further enhanced by advantageous strategic patterning of cutting edges on a rotary cutter, and further by secondary shredding features. For example, on the same axis as the rotary cutter, may be disposed, one on each end, rotating secondary

shredders that receive material that has been cut by the rotary cutter as well as material that has escaped cutting by the rotary cutter. A variety of materials, of different thicknesses and types, may be reduced to a dust or powder-size. A single destruction machine advantageously may receive (with minimal operator intervention) a mixed input load, such as a mixture of a combination of paper (including paper that is folded, ripped, stapled, or otherwise irregular), CDs, DVDs, polyester, plastic cards, SMART cards, wood, and/or other generally-planar materials.

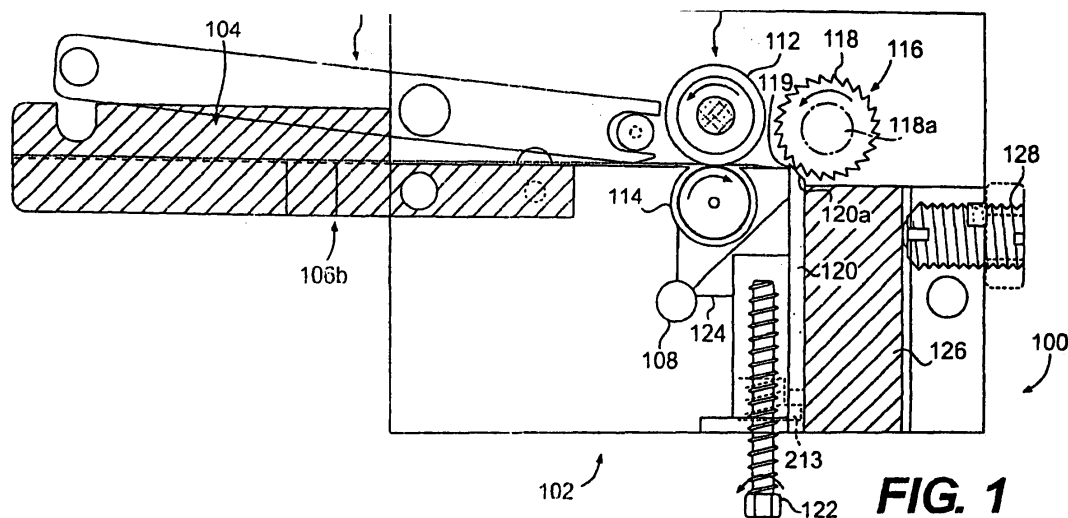


FIG. 1

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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Y	* the whole document *	6	B02C18/14
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Y	EP 1 177 832 A (KABUSHIKI KAISHA MEIKO SHOKAI) 6 February 2002 (2002-02-06)	6	
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			TECHNICAL FIELDS SEARCHED (IPC)
			B02C
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 24 November 2005	Examiner Kopacz, I
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

**CLAIMS INCURRING FEES**

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1-6



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-6

Method for destroying a non-homogeneous load

2. claims: 7-8

Use of single destruction machine for destroying a
non-homogeneous load to produce high security fine pieces

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 05 25 5803

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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24-11-2005

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